

AMENDMENT TO THE CLAIMS

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11. (Currently Amended) A method for the management of network topology and bandwidth comprising:

determining a source of data for communication to a termination point having a predetermined operational signal frequency;

separating telephony signals from digital subscriber line signals;

routing the telephony signals to an input of a frequency demultiplexer;

sending the telephony signals from an output of the frequency demultiplexer to an input of a frequency crossbar that bridges inputs to different transceivers and to different telephony ports;

bridging the output of the frequency demultiplexer in the frequency crossbar to one of the telephony ports based on a frequency of [[the]] voice signals in the telephony signals;

routing the digital subscriber line signals to the input of the frequency demultiplexer;

sending the digital subscriber line signals from another output of the frequency demultiplexer to another input of the frequency crossbar;

bridging the another output of the frequency demultiplexer in the frequency crossbar to another telephony port based on a [[the]] frequency of the digital subscriber line signals; and

selecting an Ethernet output port and bridging the digital subscriber line signals onto a path through the frequency cross bar that connects to the Ethernet output port
~~receiving Ethernet signals at a transceiver and bridging the Ethernet signals in the frequency crossbar to a different one of the telephony ports.~~

12. (Original) The method as recited in claim 11, further comprising routing the data using addressing information.

13. (Previously Presented) The method as recited in claim 11, further comprising configuring a network adapter.

14. (Previously Presented) The method as recited in claim 13, further comprising executing at least one instruction set for use in selecting the network adapter, the instruction set being executed by a control logic circuit.

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16. (Currently Amended) An apparatus for the management of network topology and bandwidth comprising:

an input module having ports to receive ~~various~~ network couplers from ~~various~~ voice and ~~non-voice~~ data networks;

software ~~a control module~~ having at least one instruction set for execution to determine source and destination points of voice signals and data which are ~~[[is]]~~ communicated across the apparatus ~~to and from the various voice and non-voice data networks~~, the software causing the apparatus to ~~control module~~.

receive telephony signals and digital subscriber line signals at an input;
separate the ~~separating~~ telephony signals from the digital subscriber line signals;
route ~~routing~~ the telephony signals to an input of a frequency demultiplexer;
send ~~sending~~ the telephony signals from an output of the frequency demultiplexer
to a first ~~[[an]]~~ input of a frequency crossbar that bridges inputs to different transceivers
and to different telephony ports;
bridge the first input ~~bridging the output~~ of the frequency demultiplexer in the
frequency crossbar to one of the telephony ports based on a frequency of the telephony
~~voice~~ signals;
route ~~routing~~ the digital subscriber line signals to the input of the frequency
demultiplexer;
send ~~sending~~ the digital subscriber line signals from another output of the
frequency demultiplexer to a second ~~another~~ input of the frequency crossbar;
bridge ~~bridging~~ the second input ~~another output~~ of the frequency demultiplexer in
~~the~~ frequency crossbar to another telephony port based on a [[the]] frequency of the
digital subscriber line signals; and
select an Ethernet output port and ~~bridging the digital subscriber line signals onto~~
a path through the frequency cross bar that connects to the Ethernet output port ~~receiving~~
~~Ethernet signals at a transceiver and bridging the Ethernet signals in the frequency~~
~~crossbar to a different one of the telephony ports~~[[;]].

17. (Original) The apparatus as recited in claim 16, further comprising:

a computing application interface, the computing application interface for use to
communicate with at least one computing application for use in configuring the
apparatus.

18. (Previously Presented) The apparatus as recited in claim 17, wherein the computing
application comprises a Web browser interface.

19. (Currently Amended) The apparatus as recited in claim 16, further comprising multiple input ports ~~a plurality of output ports for use when routing the Ethernet data.~~
20. (Currently Amended) The apparatus as recited in claim [[19]] 16, further comprising an ~~wherein the output ports comprise~~ RJ-11 type port[[s]].
21. (Currently Amended) The apparatus as recited in claim 16, wherein the software control module ~~module~~ selects a network adapter comprising any of an home phone networking alliance [[HPNA]] adapter, coaxial network adapter, an Ethernet network adapter, wireless network adapter, plain old telephone system [[POTS]] adapters and a power line network adapter.
22. (Previously Presented) A method for managing a network control device, the method comprising:
- accessing a graphical user interface having a topology management control and an application services gateway control;
 - activating the topology management control to execute one or more instructions to configure a network management device;
 - activating the application services gateway control to execute one or more instructions to configure the network management device to operate with services provided by a telephone services provider;
 - determining a source of data for communication to a termination point having a predetermined operational signal frequency;
 - separating telephony signals from digital subscriber line signals using a frequency demultiplexer;
 - sending the telephony signals from an output of the frequency demultiplexer to an input of a frequency crossbar that bridges inputs to different transceivers and to different telephony ports;

bridging the output of the frequency demultiplexer in the frequency crossbar to one of the telephony ports based on a frequency of the voice signals;

sending the digital subscriber line signals from another output of the frequency demultiplexer to another input of the frequency crossbar;

bridging the another output of the frequency demultiplexer in the frequency crossbar to another telephony port based on the frequency of the digital subscriber line signals; and

receiving Ethernet signals at an Ethernet port;

selecting a different one of the telephony ports as a destination for the Ethernet signals;

selecting a transceiver associated with the different one of the telephony ports;

bridging the transceiver to the different one of the telephony ports in the frequency crossbar; and

routing the Ethernet signals from the transceiver, into the frequency crossbar, and to the different one of the telephony ports.

23. (Previously Presented) The method of claim 22, wherein activating the topology management control to execute one or more instructions to configure a network management device comprises selecting configuration information including one or more of network addressing information, encryption information and network/bandwidth topology information.

24 (Previously Presented) The method of claim 22, wherein activating the application services gateway control to execute one or more instructions to configure the network management device comprises selecting services comprising one or more of video on demand, music on demand, remote security applications and video conferencing.

25. (Previously Presented) The method of claim 22, wherein accessing a graphical user interface comprises navigating controls of the network management device using a computer browser application.

26. (Previously Presented) The method of claim 22, wherein activating the topology management control further comprises manipulating controls for configuring one of a home network and a small office network.

27. (Currently Amended) The method of claim 22, further comprising selecting a network adapter ~~wherein routing the telephony signals and the digital subscriber line signals comprises routing network data packets to one or more of an HPNA adapter, a coaxial network adapter, an Ethernet network adapter, a wireless network adapter, a POTS adapter, and a power line network adapter.~~

28. (Currently Amended) A non-transitory computer-readable medium having computer-executable instructions for performing a method for managing a network control device, the method comprising:

accessing a graphical user interface having a topology management control and an application services gateway control;

activating the topology management control to execute one or more instructions to configure a network management device;

activating the application services gateway control to execute one or more instructions to configure the network management device to operate with services provided by a telephone services provider;

determining a source of data for communication to a termination point having a predetermined operational signal frequency;

separating telephony signals from digital subscriber line signals using a frequency demultiplexer;

sending the telephony signals from an output of the frequency demultiplexer to a first ~~[[an]]~~ input of a frequency crossbar that bridges inputs to different transceivers and to different telephony ports;

bridging the first input ~~the output~~ of the ~~frequency demultiplexer in the~~ frequency crossbar to one of the telephony ports based on a frequency of the telephony voice signals;

sending the digital subscriber line signals ~~from another output of the frequency demultiplexer~~ to a second ~~another~~ input of the frequency crossbar;

bridging the second input ~~another output~~ of the ~~frequency demultiplexer in the~~ frequency crossbar to another telephony port based on the frequency of the digital subscriber line signals; and

selecting an Ethernet output port and bridging the digital subscriber line signals onto a path through the frequency cross bar that connects to the Ethernet output port

~~receiving Ethernet signals at an Ethernet port;~~

~~selecting a different one of the telephony ports as a destination for the Ethernet signals;~~

~~selecting a transceiver associated with the different one of the telephony ports;~~

~~bridging the transceiver to the different one of the telephony ports in the frequency crossbar; and~~

~~routing the Ethernet signals from the transceiver, into the frequency crossbar, and to the different one of the telephony ports.~~

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30. (Previously Presented) The computer-readable medium of claim 28, wherein activating the application services gateway control to execute one or more instructions to configure the network management device comprises selecting services comprising one or more of video on demand, music on demand, remote security applications and video conferencing.

31. (Previously Presented) The computer-readable medium of claim 28, wherein accessing a graphical user interface comprises navigating controls of the network management device using a computer browser application.
32. (Previously Presented) The computer-readable medium of claim 28, wherein activating the topology management control further comprises manipulating controls for configuring one of a home network and a small office network.
33. (Currently Amended) The computer-readable medium of claim 28, further comprising selecting a network adapter from ~~wherein routing one or more of voice information and non-voice information through the configured network management device to network adapters comprises routing network data packets to one or more of~~ an HPNA adapter, a coaxial network adapter, an Ethernet network adapter, a wireless network adapter, a POTS adapter, and a power line network adapter.